ACHILLION PHARMACEUTICALS INC Form SC 13D/A August 20, 2014			
UNITED STATES SECURITIES AND EXCHANGE COMMISSION	OMB API	PROVAL	
Washington, D.C. 20549	OMB Nur	mber:K235-014	5
	Expires: February 28, 2009 Estimated average burden		
SCHEDULE 13D	hours per	response	10.4
Under the Securities Exchange Act of 1934			
(Amendment No. 3)*			
Achillion Pharmaceuticals, Inc.			
(Name of Issuer)			
Common Stock, \$0.001 par value per share			
(Title of Class of Securities)			
H0448Q201			
(CUSIP Number)			
RA Capital Management, LLC			

20 Park Plaza, Suite 1200

Boston, MA 02116

Telephone: 617.778.2512
Attn: Peter Kolchinsky
(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)
August 15, 2014
(Date of Event Which Requires Filing of this Statement)
If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. [X]
Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.
* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.
The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

Names of Reporting Persons. 1 RA Capital Management, **LLC** Check the Appropriate Box if a Member of a Group 2 (See Instructions) (a) [] [] (b) SEC Use Only 3 Source of Funds (See Instructions): 4 WC Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e): 5 []Citizenship or Place of Organization. Massachusetts 6 Number 7 Sole Voting

Power 0

of Shares shares

Beneficially

8 Shared

Owned by Voting Power

21,251,007

Each shares

Reporting

Person With

9 Sole
Dispositive
Power 0
shares

10 Shared Dispositive Power

21,251,007

shares

Aggregate Amount Beneficially Owned by Each Reporting

Person 11

21,251,007 shares

Check if the
Aggregate Amount
in Row (11)
Excludes Certain
Shares (See
Instructions) []
Percent of Class
Represented by
Amount in Row
(11)

21.1%

Type of Reporting Person (See Instructions)

14 IA, OO (Limited Liability Company)

Names of Reporting

Persons. 1 **RA Capital Healthcare** Fund, L.P. Check the Appropriate Box if a Member of a 2 Group (See Instructions) (a) [] [] (b) SEC Use Only 3 Source of Funds (See Instructions): 4 AF Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e): 5 []Citizenship or Place of Organization. **Delaware** 6 Number 7 Sole Voting Power 0 of Shares shares Beneficially 8 Shared

Voting Power **16,911,860**

shares

Owned by

Reporting

Each

Person With

Sole Dispositive Power 0 shares

10 Shared Dispositive Power

16,911,860

shares

Aggregate Amount Beneficially Owned by Each Reporting Person

16,911,860 shares

Check if the

Aggregate

Amount in Row

12 (11) Excludes

Certain Shares

(See

Instructions) [] Percent of Class

Represented by

Amount in Row

(11)13

11

16.9%

Type of Reporting Person (See Instructions)

14 PN (Limited Partnership)

Names of Reporting Persons. 1 **Peter Kolchinsky** Check the Appropriate Box if a Member of a Group (See 2 Instructions) (a) [][] (b) SEC Use Only 3 Source of Funds (See Instructions): 4 AF Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e): 5 [] Citizenship or Place of Organization. **United States** 6 Number Sole Voting Power 0 shares of Shares Beneficially 8 Shared Voting Power Owned by 21,251,007shares Each Sole Dispositive Reporting Power 0 shares Person With 10 Shared

Dispositive Power

21,251,007 shares

Aggregate Amount
Beneficially Owned
by Each Reporting
Person

21,251,007 shares

Check if the
Aggregate Amount in
Row (11) Excludes
Certain Shares (See
Instructions) []
Percent of Class
Represented by
Amount in Row (11)

21.1%

11

13

14

Type of Reporting Person (See Instructions)

HC, IN

CUSIP No. 00448Q201
SCHEDULE 13D
Item 1. Security and Issuer
This Schedule 13D relates to shares of Common Stock, par value \$0.001 per share (the "Common Stock"), of Achillion Pharmaceuticals, Inc., a Delaware corporation (the "Issuer"). The address of the principal executive offices of the Issuer is: 300 George Street, New Haven, CT 06511.
Item 2. Identity and Background
(a) This Schedule 13D is being filed on behalf of (i) RA Capital Healthcare Fund, L.P. (the "Fund"), (ii) Peter Kolchinsky, and (iii) RA Capital Management, LLC ("RA Capital" and together with each of the foregoing, the "Reporting Persons").
Shares reported herein for the Fund represent shares of Common Stock (i) held of record by the Fund and (ii) issuable upon exercise of call options held of record by the Fund. Shares reported herein for RA Capital represent (a) the above-referenced shares of Common Stock reported for the Fund, for which RA Capital serves as the sole general partner, and (b) shares of Common Stock (I) held in a separately managed account for which RA Capital serves as investment adviser (the "Account") and (II) issuable upon exercise of call options held in the Account. Shares reported herein for Mr. Kolchinsky represent the above-referenced shares of Common Stock reported for RA Capital, for which Mr. Kolchinsky serves as the manager. Each of the Reporting Persons disclaims beneficial ownership of the shares reported herein except to the extent of its or his pecuniary interest therein.
(b) The business address of each of the Reporting Persons is: 20 Park Plaza, Suite 1200, Boston, MA 02116.
(c) The Fund is a private investment vehicle. RA Capital provides investment management services to the Fund and the Account. The principal occupation of Mr. Kolchinsky is investment management.

- (d) None of the Reporting Persons has, during the last five years, been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) None of the Reporting Persons has, during the last five years, been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.
- (f) See Item 6 of the cover pages.

Item 3. Source and Amount of Funds or Other Consideration

The Reporting Persons acquired the shares of Common Stock reported herein in market transactions, using working capital of the Fund and the Account to fund the purchase of such shares.

Item 4. Purpose of Transaction

The Reporting Persons acquired the shares of Common Stock reported herein for investment purposes and not with an intent, purpose or effect of changing control of the Issuer.

CUSIP No. 00448Q201

The Reporting Persons may acquire additional shares of Common Stock and other securities of the Issuer from time to time or may dispose of any or all of such shares or other securities held by them at any time.

The Reporting Persons intend to evaluate on an ongoing basis their investments in the Issuer and their options with respect to such investments.

The Reporting Persons reserve the right to change their purpose and to formulate and implement plans or proposals with respect to the Issuer at any time and from time to time. Any such action may be made by the Reporting Persons alone or in conjunction with other shareholders, potential acquirers, financing sources and/or other third parties and could include one or more purposes, plans or proposals that relate to or would result in actions required to be reported herein in accordance with Item 4 of Schedule 13D.

Item 5. Interest in Securities of the Issuer

(a) and (b) See Items 7-11 of the cover pages and Item 2 above.

Pursuant to Rule 13d-4, each of the Reporting Persons expressly declares that this Schedule 13D and any amendments hereto shall not be construed as an admission that such Reporting Person is, for the purposes of Section 13(d) or 13(g) of the Securities Exchange Act of 1934, as amended, the beneficial owner of any securities reported herein, except to the extent that such Reporting Person owns such shares.

The percentage calculations herein are based on information provided by the Issuer in its Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission on May 7, 2014.

(c) The following table lists the Reporting Persons' transactions in the Common Stock that were effected during the sixty day period prior to the filing of this Schedule 13D:

Transaction Date No. Shares Price Sell (open market) 20-Jun-2014 668,000* and 132,000 8.4085

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Sell (open market) 20-Jun-2014
                                   66,800* and 13,200
                                                        8.2950
Sell (open market) 15-Aug-2014
                                   462,666* and 218,056 9.4884
Sell (open market)
                       15-Aug-2014611,703* and 288,297 9.3409
Sell (open market) 15-Aug-2014
                                   448,786* and 211,514 9.3952
Sell (open market) 18-Aug-2014
                                    176,020* and 82,958 9.5748
Sell (open market) 18-Aug-2014
                                   431,609* and 203,391 9.7321
Sell (open market) 18-Aug-2014
                                    259,034* and 140,966 9.7032
Sell (open market) 18-Aug-2014
                                    294,922* and 120,078 9.6786
Sell (open market) 18-Aug-2014
                                    33,985* and 16,015
                                                        9.7450
Sell (open market) 18-Aug-2014
                                    159,730* and 75,270 9.51
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Sales marked with an * are sales by the Fund the rest are sales by the Account on the open market. The shares involved in these transactions may be deemed to have been beneficially owned by the Manager and Mr. Kolchinsky.

(d) Not applicable.

(e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Option Contract	Expiration Date No. Option Contracts			Strike Price	
Call Option					
	01/17/2015	24,000* and 6,00	00	5.00	
(right to buy)					
Call Option					
-	01/17/2015	19,200* and 5,80	00	20.00	
(obligation to sell))				
Call Option					
-	01/17/2015	4,800*	and 200	7.50	
(obligation to sell))				

Contracts marked with an * are held by the Fund the rest are held by the Account. The shares involved in these transactions may be deemed to have been beneficially owned by the Manager and Mr. Kolchinsky.

Item 7. Material to Be Filed as Exhibits

Exhibit 99.1 Joint Filing Agreement by and among the Reporting Persons.

The Joint Filing Agreement, executed by and among the Reporting Persons, dated October 4, 2013, which was filed as an exhibit to the Schedule 13G filed by the Reporting Persons with the Securities and Exchange Commission on October 4, 2013, is hereby incorporated by reference.

SIGNATURE
After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.
Date: August 20, 2014
RA CAPITAL HEALTHCARE FUND, L.P.
By: RA Capital Management, LLC General Partner
By: /s/ Peter Kolchinsky
Peter Kolchinsky
Manager
RA CAPITAL MANAGEMENT, LLC

Peter Kolchinsky

By: /s/ Peter Kolchinsky

Manager

/s/ Peter Kolchinsky	PETER KOLCHINSKY		
	/s/ Peter Kolchinsky		